

diagnosed with cancer (60.6%) than male respondents (39.4%). Whites were more likely to report a diagnosis of cancer (84.8%) than African Americans (11.0%), compared to their distribution in the non-cancer group. Given the fact that cancer survivors were significantly older than those without cancer (as expected), the results also show that almost half of all cancer survivors were either retired or in some non-employed capacity.

The weighted prevalence for chronic diseases and health conditions (Table 2) was found to be higher among cancer survivors compared to adults without cancer. The prevalence of cardiovascular disease and kidney disease was more than two times greater among cancer survivors. After controlling for age, cancer survivors had a significantly greater relative risk of having arthritis, kidney disease, disability, chronic obstructive pulmonary disease (COPD), and asthma. Compared to adults without cancer, cancer survivors had a 13 percent higher probability of having arthritis; a 54 percent higher probability of kidney disease; a 12 percent higher probability of disability; a 30 percent higher probability of COPD; and a 48 percent higher probability of asthma.

In conclusion, the overall burden of chronic disease appears to be higher among cancer survivors. When compared to those with no reported history of cancer, we also found that cancer survivorship was strongly associated with the majority of chronic diseases we examined. Limitations of the survey do not allow us to examine the association that cancer treatment may have had with chronic disease among survivors.

**Suggested citation:** Herrick H. *Cancer Survivors and Chronic Disease*. North Carolina BRFSS Surveillance Update, No. 3. Raleigh, NC: DHHS, Chronic Disease and Injury Section, State Center for Health Statistics, October, 2010.

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**Table 2**  
**Weighted Prevalence and Age-adjusted Relative Risk of Chronic Diseases and Health Conditions Among Cancer Survivors Compared to Adults Without a History of Cancer: 2009 NC BRFSS Survey (N = 12,615).**

Chronic Disease/ Health Condition	Prevalence		Relative Risk	
	Cancer Survivors %	Without Cancer %	aRR	95% C.I.
Diabetes	16.0	9.1	1.00	0.83–1.19
Arthritis	47.5	25.4	1.13*	1.03–1.23
Cardiovascular disease	17.4	7.8	1.05	0.90–1.24
High blood pressure	50.1	30.1	1.02	0.95–1.10
Kidney disease	4.0	1.7	1.54*	1.10–2.15
Disability	43.8	28.9	1.12*	1.02–1.23
COPD	9.6	5.1	1.30*	1.02–1.66
Asthma	10.1	7.7	1.48*	1.15–1.89

Abbreviations: COPD—chronic obstructive pulmonary disease;  
aRR—age-adjusted relative risk.

\*Statistically significant  $p < 0.05$

